July 18, 2007

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th St., SW
Washington, DC 20554

Re: Notification of *Ex Parte* Communications
WT Docket Nos. 96-86, 06-150; PS Docket No. 06-229

Dear Ms. Dortch:

This letter is to report permitted, oral *ex parte* communications of Frontline Wireless, LLC ("Frontline") and its counsel concerning the above-referenced proceedings.

On July 17, 2007, Janice Obuchowski, Jonathan Blake and Gerard Waldron met with Fred Campbell, Chief of the Wireless Telecommunications Bureau, as well as Cathleen Massey, James Schlichting, Paul Murray, John Branscome, Margaret Wiener, Nese Guendelsberger, and Peter Trachtenberg from the Bureau. The attached slidedeck entitled, "Discussion of Proposed Service Rules" was distributed in this meeting. In a separate meeting, Reed Hundt spoke with Commissioner Jonathan S. Adelstein and discussed the attached slidedeck entitled, "700 MHz Revenue Impact." Finally, Mr. Waldron spoke with Bruce Gottlieb, legal advisor to Commissioner Michael J. Copps.

In these meetings, the parties discussed the need for a no-retail condition to be combined with open access rules on the "C Block" in order to achieve the goals that the open access condition would be intended to promote. With regard to the "D Block," the parties spoke about public safety's need for a 4G network reaching 99% of the population. Finally, the parties discussed the importance of making the small business bidding credit available to all qualified bidders.

Please direct any questions concerning this matter to the undersigned.

Sincerely,

Jonathan D. Blake
Counsel to Frontline Wireless, LLC

cc: Fred Campbell
Cathleen Massey
James Schlichting
Paul Murray
John Branscome
Margaret Wiener
Nese Guendelsberger
Peter Trachtenberg
Barry Ohlson
Bruce Gottlieb

Discussion of Proposed Service Rules

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W I R E L E S S

July 17, 2007

AUCTION RESULTS ARE IN JEOPARDY: FCC SHOULD MAKE SPECIFIC FIXES NOW.

- If there is a reserve price, it should be a threshold price and it should be per auction block, not linked to total auction revenues. Otherwise bidders will be deterred, revenues will be suppressed and the outcome could be nonsensical.

- Bidding credits must be made available to qualifying small businesses, subject to limit of 25% of capacity to any one retailer.

- We support Commissioners' idea for a limit on the amount of spectrum any one bidder can win. (For optimal effectiveness, 24 MHz would be appropriate limit.) This will promote capital formation and spur numerous bidders.

FIXES TO C BLOCK PROPOSAL.

- No-retail must be added to no-lock/no-block; otherwise goal of facilitating high tech deployment will be thwarted.
- Wholesale requirement is necessary to permit nationwide service and to avoid incumbent blocking by purchase of one regional license. Package bidding is not sufficient protection from incumbent blocking.

FIXES TO C BLOCK PROPOSAL (cont).

- The reserve price should be proportional to the amount of spectrum, i.e., it should be 22/60 of the total reserve price.
- Auctioning 22 MHz in six regional licenses raises serious concerns; alternatives should be considered.

FIXES TO D BLOCK PROPOSAL.

- 99% buildout, 4G, interoperable (Verizon’s 75% proposal leaves 90 million people uncovered).
- It must be a real buildout with activated, operational channels in the 700 MHz band.
- The D Block licensee must be wholesale because that serves pubic safety’s needs for national interoperability and local choice.
- Also, without a wholesale requirement, there will be no bidder competition and the spectrum will go to incumbents for a song.

FIXES TO D BLOCK PROPOSAL (cont).

- The small business bidding credit should be made available because it fits with public safety's desire to use MVNO model and because it will attract new bidders.
- NPSL should be allowed choice of whom to do business with but it should not be able to thwart award of D Block license to high bidder that has negotiated with NPSL in good faith.
  - Incumbents have track record of indifference to PS.
  - NPSL veto would deter raising of capital by new entrants and drastically impair auction revenues.

700 MHz Revenue Impact

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July 16, 2007

Competition Increases Revenue

- Dangerous incentive for emerging duopolists to bid to foreclosure entry
  - Particularly true in 700 MHz Auction due to low-frequency “coverage” rents
  - Incumbent value = economic value + lost duopoly rents
- This incentive deters capital formation behind new entrant bids, reduces bidder competition, and lowers auction revenues
- Economic theory and previous auctions show that restrictions on incumbent bidding and preferences for new entrants increase auction revenues
- Auction rules tailored to promote new entry and bidder flexibility will attract new capital and increase revenues

The Martin Plan

Based on press reports and other sources

- C Block
  - 22 MHz (2x11 MHz), 6 very large REAG licenses, possibly package bidding
  - Open Access Lite: No lock/no block *principles* but no specific rules, no enforcement mechanism, no wholesale-only requirement, sunset at 10-year license renewal
- D Block
  - 10 MHz (2x5 MHz), nationwide license
  - Public Safety Sharing: must share network with neighboring public safety licensee, unclear whether build is 99% of pops or Verizon's 75% proposal
  - No open access or wholesale
  - Public safety may have veto rights on commercial license issuance, technology choice
- Reserve Price
  - $4.2 billion reserve price on C Block ($0.64 per MHz-Pop), $10 billion reserve on overall auction ($0.54 per MHz-Pop) – over 10 times AWS reserve price of $0.04 per MHz-Pop
  - Appears to be no reserve price on D Block nor on Lower 700 MHz
  - If reserve not met, triggers "do over" minus the open access rules
- Spectrum Cap
  - No bidder can win both the C Block and the D Block (exact mechanism unclear)
- DE Credit
  - Likely would require retail business model, if available at all

Plan would jeopardize auction revenue, auction efficiency, and post-auction competition

1. Open Access block with meaningful no lock / no block / no retail rules required to draw new entrants into the auction – but no such rules apparently in plan and so auction revenues will drop
2. DE credit should encourage, not discourage, the formation of wholesale-only consortia – but apparently FCC intends to limit number of bidders with DE credit thereby reducing auction revenue
3. Reserve prices set irrationally, inconsistently, and without precedent – this will drive down number of bidders and reduce auction revenue
4. FCC intends to block bidders on C from bidding on D and vice-versa, reducing number of bidders and driving down auction revenue
5. Public safety “veto rights” on D Block would kill any new entrants ability to raise capital to bid, and reduce auction revenue

1. Open Access Block

- Open Access rules should be designed to maximize new entrants and thereby auction revenue
- Economics theory and over a decade of auction experience shows that rules promoting new entry increase auction revenues (see appendix)
- C Block as structured in Martin Plan is transparently pro-Incumbent, and will impede capital formation by new bidders
  - Weak open access provisions and large block sizes deter new entrants
- Only robust no lock / no block / no retail rules on C Block, coupled with meaningful build requirement, will cause new entrants to bid up the value
- Splitting 22 MHz REAG into two 11 MHz Blocks would further stimulate competition by increasing bidder flexibility
- Verizon and AT&T will bid vigorously in D Block and Lower 700 MHz and even open access blocks (see Quinn quote in appendix)
- Clear pro-new entrant rules in C Block will increase overall demand in the auction and maximize total auction revenues

2. DE Credit

- DE credits are proven to increase auction revenues and efficiency by motivating new entry
- Current DE rules prohibit wholesale-only business model that is likely to be the basis for new entrant consortium bidders
- Anti-concentration rules can effectively prevent “DE arbitrage” by limiting resale to incumbents
- FCC should unambiguously declare that wholesale-only bidders can use DE credit
- Large DE credit is necessary to overcome incumbent’s foreclosure value

3. Reserve Prices

- Unprecedented to have reserve prices of this magnitude, likely chilling effect on auction participation
  – Participation is motivated by the possibility of a great deal
  – Bidders often increase their budget during the auction
- Excluding D Block from reserve calculation means Verizon can get it for free, reducing auction revenues
- Loading of reserve price onto C Block, plus “do-over” provisions, deters new entrants and encourages incumbent gaming, reducing auction revenues
  – Incumbents have strong incentives *not to bid* in the auction in order to trigger a less competitive do-over auction
- Overall reserve price likely to lower total auction revenues, since “do-over” auction will produce low prices
- Rules are inefficient, arbitrary, unprecedented, and likely to produce poor results from treasury perspective

4. Either/Or Rule

- Either/Or Rule well-intentioned because defining some blocks as suitable for certain business models has historically increased auction revenues (e.g., Auction 4)
  - Selling licenses to promote competition produces more revenue than selling licenses to bolster monopoly
- However, the rule as proposed will stifle competition in the auction, reducing auction revenue:
  - Encourages Bells to carve up the Upper 700 and eliminates competition between them
  - Creates a one-way “eligibility trap” and a sequential auction from C Block to D Block
  - Does not address rent-protection incentives in Lower 700
- Auction-wide spectrum limit (22 MHz x 300M Pops) would directly address the problem and increase revenues

5. Public Safety Veto

- Inordinate control of D Block license by public safety will have devastating revenue implications
  - Veto right over the license is a clear poison pill for new entrants: impossible to raise equity to bid
  - Ability to choose technology is essentially a backdoor veto right as this is the most important strategic decision a commercial operator will ever make
- Technology choice also allows public safety to rig the auction by announcing an incumbent-friendly technology choice (e.g., EVDO) prior to the auction
  - Technology earmark will eliminate all bidder competition for the block

Implications of Plan As it Stands

- High tech and other new entrants will not show up
  - C Block open access provisions are toothless, large REAG licenses favor incumbents, easy to block new entrant even with package bidding
  - D Block national license without open access also favors incumbents, public safety veto rights make it impossible for new entrants to raise capital to bid
  - "Retail only" DE rule discourages new entrants from organizing horizontal wholesale bidding consortia, and is anti-competitive
- Other likely suspects won't bid
  - Sprint has announced it will not bid
  - T-Mobile just spent $4.1B on spectrum in AWS-1
  - DBS dropped out of AWS REAG bidding at close to half of final value
  - SpectrumCo has asked for EA sized licenses
  - Leap and MetroPCS want small licenses
- AT&T and Verizon will carve up Upper 700 at very low prices:

D Block	**C Block**
Verizon	**AT&T**

- Dangerous risk of dramatic revenue shortfall and delay in payment

What Should Be Done

- Clear and enforceable rules on the C block should make it the entrepreneurs block, so that all who want an open access regime are encouraged to bid on this block
  - Also split 22 MHz C Block into two 11 MHz blocks to further enhance competition
- DE Credit should embrace wholesale business model
- Reserve prices should be modeled on proven approach used in AWS Auction: ~$0.04 per MHz-Pop across the entire auction, with no distinctions between blocks
- Replace Either/Or rule with auction-wide restriction of 6.6 billion MHz-Pop per bidder (22 MHz x 300M Pops)
- Ensure commercial D Block licensee is not subject to licensing or technology veto by public safety
- Other procedural matters:
  - Short form deposit should be Dec 1 and auction should start Jan 15 to encourage capital formation
  - Repeat AWS formula for eligibility/upfront payment calculation: $0.05/MHz-Pop for urban licenses, $0.03/MHz-Pop for rural licenses

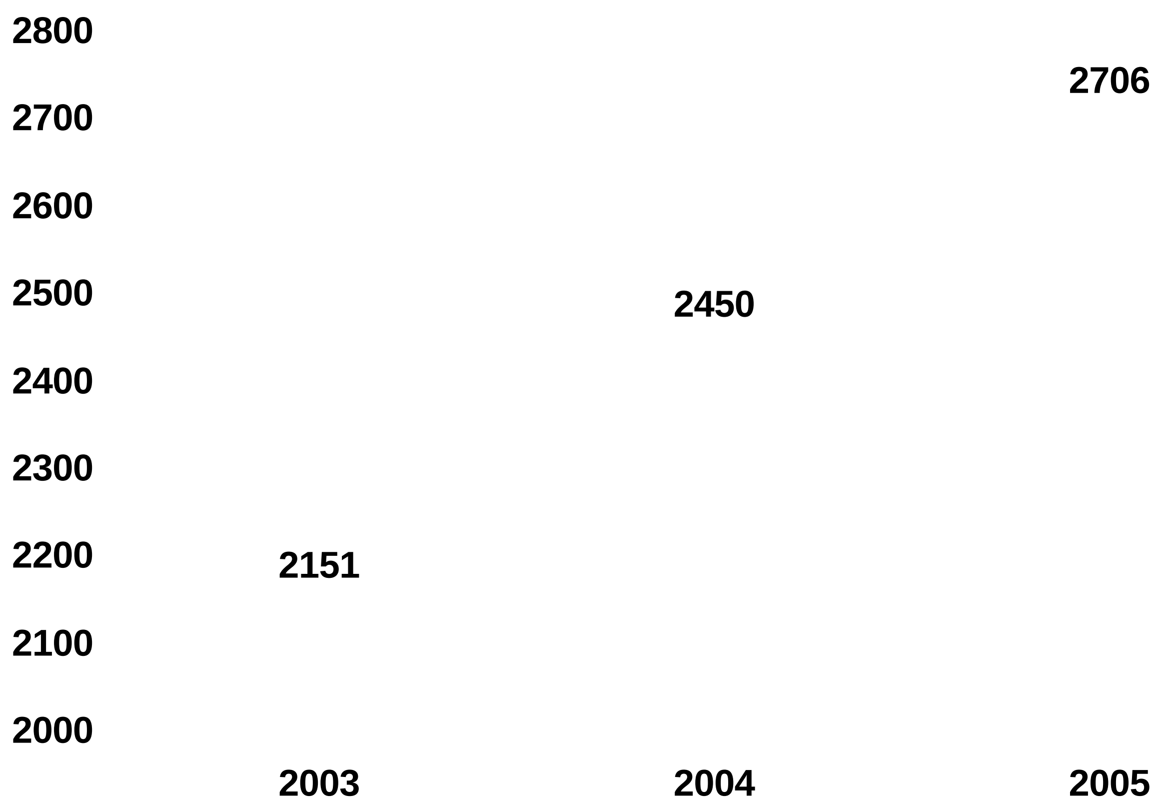
Appendix: Open Access Rules Increase Auction Revenues

Verizon and AT&T Incentives

- Verizon and AT&T earn substantial scarcity rents from holding nearly all of the original low frequency Cellular licenses, which gives them operational and quality advantages reflected in their prices and profits
- The 700 MHz spectrum has high “foreclosure value” to Verizon and AT&T, separate from the true “economic value” of building and operating a network.
- Market entry by new 700 MHz bidders threatens their incumbent position
- Verizon and AT&T will defend their position and they have the capital to do so

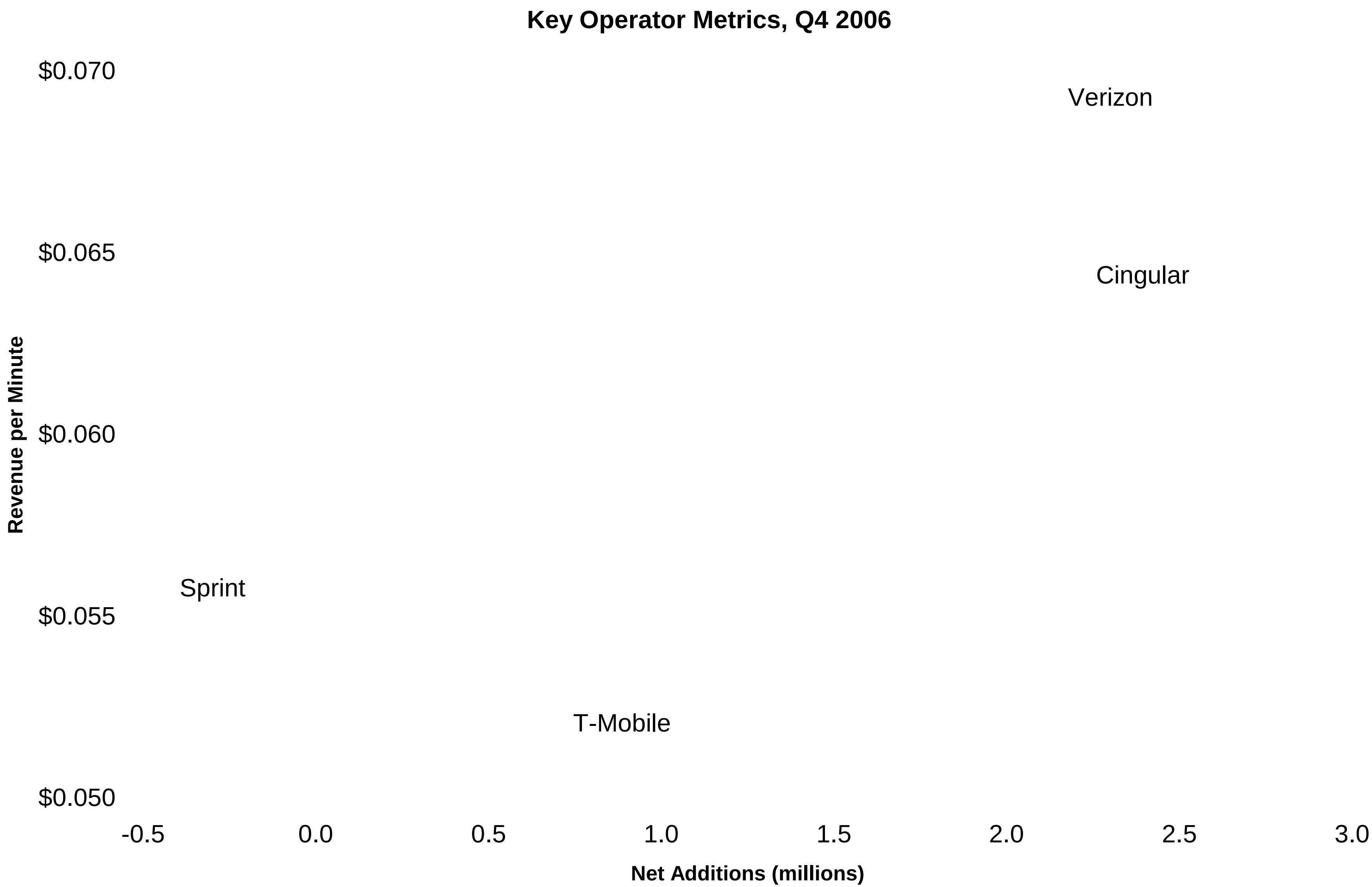
Wireless Market is "Highly Concentrated"

Average Market HHI



Source: FCC 9th, 10th and 11th CMRS Reports

Verizon & AT&T Dominant on Price and Share



VZ and AT&T Low Frequency Rents

The Low Frequency Advantage

1.9 GHz (PCS)

800 MHz (Cellular)

- 3-4x range and 8-10x area
- Superior in-building penetration
- Reduced scatter from rain and other environmental factors
- Higher quality with fewer towers

Low Frequency Holdings

Verizon	23 MHz
AT&T	22 MHz
Sprint	0 MHz
T-Mobile	0 MHz

- Average holdings per market
- Includes spectrum used in core business (ie CDMA & GSM, not iDEN)

Foreclosure Value Deters Bidders

- High foreclosure value to Verizon and AT&T deters new entrants from participating in the auction, reducing bidder competition and driving down auction revenues.
- New entrants rationally stay away from an auction when the costs of participating outweigh the expected profits
  - Incumbent advantage reduces the chance the entrant will win and reduces the entrant’s profits if it does enter and win
  - SMR auction format makes it especially easy for Verizon and AT&T to prevent entry of a nationwide player.
- Incumbents win in 2 ways: preventing competition and paying very little
- See paper by Cramton, Skrzypacz, and Wilson

Examples

- Auction 35: VZ and A&T foreclosed entry into NYC
- Auction 4: PacTel discouraged entry in Los Angeles, license sold for a song
- European 3G Auctions: new entrant set asides increased revenues
- Auction 11: AT&T retaliatory bidding reduced prices

Open Access Requirements

- No locking of network from new devices
- No blocking of content / applications / services
- No retailing of service – creates structural incentive for no lock / no block
- Detailed rules with enforcement provisions
- Meaningful buildout requirements to prevent warehousing

Open Access Will Increase Revenue

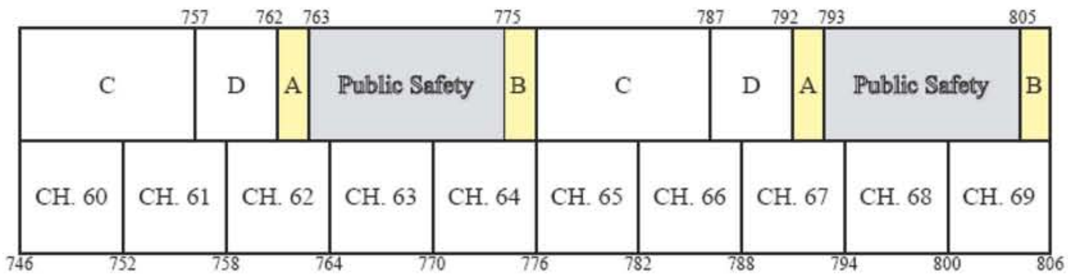
- An open access, wholesale E Block, combined with bidding credits, will increase auction revenues
  - Narrowly-tailored to assure a competitive auction: just 10 out of 60 MHz
- Rules draw new entrants into the auction to compete with the incumbent 2 bidders
- Result is greater bidder competition and causing winning bids to reflect the economic value of the spectrum
- Open access does not discourage participation from VZ and AT&T
  - Motivates entry necessary to assure a competitive auction, and competitive revenues across all the blocks
  - Simply creates competition for VZ and AT&T
- Verizon and AT&T, as well as other bidders, will still have ample spectrum to purchase spectrum under a non-open business model
- Open access increases the value of smaller licenses in the auction by guaranteeing a nationwide roaming platform

Other Revenue-Enhancing Features

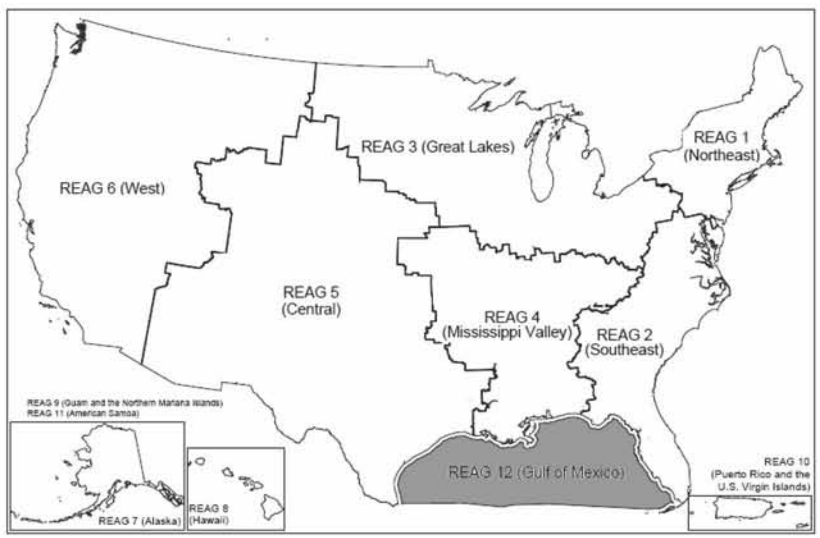
- Network Sharing will enable bidders to pay more for the E Block
  - Secondary use of the public safety spectrum during non-emergency times makes more efficient use of the spectrum, enabling the E Block winner to pay more
  - Effectively increases inventory of MHz-Pops to be auctioned
- Nationwide license will attract bidders with a nationwide business model
  - Nationwide license eliminates the exposure problem—the problem of a nationwide bidder winning some but not all of what it needs
  - Motivates participation of nationwide entrants and enables them to bid higher
- Competitive nationwide roaming will increase the value of smaller licenses
  - Guaranteed access to nationwide coverage increases value of other blocks to small and regional carriers
  - Competitive rates for roaming promotes and sustains entry and participation in the market

Verizon's Plan is Designed to Facilitate Blocking Competitors

Large Blocks…



Large REAG Geographies…



No Package Bidding…

"There is no reason for the Commission to propose providing a combinatorial bidding opportunity for the purpose of combining large regional licenses into a nationwide license."

– *Verizon Comments*

Who Will Bid on Verizon's Huge Blocks?

- Sprint has announced it will not bid
- T-Mobile just spent $4.1B on spectrum in AWS-1
- DBS dropped out of AWS REAG bidding at close to half of final value and was/is worried about exposure risk
- SpectrumCo has asked for EA sized licenses
- Leap and Metro PCS want CMA licenses
- Who else? Verizon and possibly AT&T
  - Each bought different halves of country in AWS → incentive to get non-overlapping licenses in 700 MHz and swap afterward
- In short: REAG licenses = not a lot of competition

Moments of Candor about 700 MHz

- "It's a different business model for us, but one that we'd be looking at. If, in the end, that spectrum is attached to public safety, and for example there's a wholesale requirement, we'll take a look at it.“
– *Robert Quinn, AT&T SVP Regulatory Affairs, June 24*
- "We don't have any great sense of urgency for [700 MHz]…but we'd love to have it.”
– *Randall Stephenson, AT&T CEO, June 2*
- “We doubt [open access rules] will be the driver for the emergence of a new, non-traditional provider, however, as the Bells will continue to have a large economic incentive to win the spectrum.”
– *UBS Research Report, July 13*

Further Reading

- "Auction Revenues in the 700 MHz Spectrum Auction," Peter Cramton, Andrzej Skrzypacz, and Robert Wilson 25 June 2007
- "The Design of the 700 MHz Spectrum Auction: An Opportunity to Promote Competition and Public Safety," Andrzej Skrzypacz and Robert Wilson 23 May 2007
- "Economic Comments on the Design of the 700 MHz Spectrum Auction," Peter Cramton, Andrzej Skrzypacz, and Robert Wilson 11 June 2007